



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-1171; Directorate Identifier 2011-NM-101-AD; Amendment 39-16932; AD 2012-02-09]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain The Boeing Company Model 737-100, -200, -200C, and -300 series airplanes. This AD was prompted by a report from the airplane manufacturer that airplanes were assembled with air distribution ducts in the environmental control system (ECS) wrapped with Boeing Material Specification (BMS) 8-39 or Aeronautical Materials Specifications (AMS) 3570 polyurethane foam insulation, a material with fire-retardant properties that deteriorate with age. This AD requires reworking certain air distribution ducts in the ECS. We are issuing this AD to prevent ignition of the BMS 8-39 or AMS 3570 polyurethane foam insulation on the duct assemblies of the ECS due to a potential electrical arc, which could start a small fire and lead to a larger fire that may spread throughout the airplane through the ECS.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail [me.boecom@boeing.com](mailto:me.boecom@boeing.com); Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Kimberly A. DeVoe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6495; fax: 425-917-6590; e-mail: [Kimberly.Devoe@faa.gov](mailto:Kimberly.Devoe@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on November 7, 2011 (76 FR 68666). That NPRM proposed to require reworking certain air distribution ducts in the ECS.

## Comments

We gave the public the opportunity to participate in developing this AD. We have considered the comments received. Boeing supports the NPRM (76 FR 68666, November 7, 2011).

## Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting the AD as proposed—except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (76 FR 68666, November 7, 2011) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (76 FR 68666, November 7, 2011).

## Costs of Compliance

We estimate that this AD affects 292 airplanes of U.S. registry.

We estimate the following costs to comply with this AD:

### Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Duct assembly rework/part marking	250 work-hours X \$85 per hour = \$21,250	\$3,545	\$24,795	\$7,240,140

## Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2012-02-09 **The Boeing Company**: Amendment 39-16932; Docket No. FAA-2011-1171; Directorate Identifier 2011-NM-101-AD.

#### **(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to The Boeing Company Model 737-100, -200, -200C, and -300 series airplanes, certificated in any category; as identified in Boeing Service Bulletin 737-21A1132, Revision 3, dated February 16, 2011.

#### **(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 21, Air conditioning.

#### **(e) Unsafe Condition**

This AD was prompted by a report from the airplane manufacturer that airplanes were assembled with air distribution ducts in the environmental control system (ECS) wrapped with Boeing Material Specification (BMS) 8-39 or Aeronautical Materials Specifications (AMS) 3570 polyurethane foam insulation, a material with fire retardant properties that deteriorate with age. We are issuing this AD to prevent ignition of the

BMS 8-39 or AMS 3570 polyurethane foam insulation on the duct assemblies of the ECS due to a potential electrical arc, which could start a small fire and lead to a larger fire that may spread throughout the airplane through the ECS.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Air Distribution Duct Rework**

Within 72 months after the effective date of this AD, rework the applicable duct assemblies in the ECS specified in and in accordance with the Accomplishment Instructions and Appendix A of Boeing Service Bulletin 737-21A1132, Revision 3, dated February 16, 2011.

**(h) Credit for Actions Accomplished in Accordance with Previous Service Information**

Reworking the applicable duct assemblies in the ECS in accordance with the Accomplishment Instructions and Appendix A of Boeing Service Bulletin 737-21A1132, Revision 2, dated June 13, 2007, before the effective date of this AD is acceptable for compliance with the corresponding actions required by paragraph (g) of this AD.

**(i) Parts Installation**

As of the effective date of this AD, no person may install an ECS duct assembly with BMS 8-39 or AMS 3570 polyurethane foam insulation on any airplane.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to: [9-ANM-Seattle-ACO-AMOC-Requests@faa.gov](mailto:9-ANM-Seattle-ACO-AMOC-Requests@faa.gov).

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(k) Related Information**

(1) For more information about this AD, contact Kimberly A. DeVoe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6495; fax: 425-917-6590; e-mail: [Kimberly.Devoe@faa.gov](mailto:Kimberly.Devoe@faa.gov).

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; phone: 206-544-5000, extension 1; fax: 206-766-5680; e-mail: [me.boecom@boeing.com](mailto:me.boecom@boeing.com); Internet: <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

**(l) Material Incorporated by Reference**

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information:

(i) Boeing Service Bulletin 737-21A1132, Revision 3, dated February 16, 2011.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, P. O. Box 3707, MC 2H-65, Seattle, Washington 98124-2207; telephone 206-544-5000, extension 1; fax 206-766-5680; e-mail [me.boecom@boeing.com](mailto:me.boecom@boeing.com); Internet <https://www.myboeingfleet.com>.

(3) You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on January 12, 2012.

Michael Kaszycki,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-2004 Filed 02/06/2012 at 8:45 am; Publication Date: 02/07/2012]